CLAIMS

1. A combination for indicating a position, comprising:

a moveable object

a surface of the object; and

a sequence of skew-tolerant Gray coded marks on the object which are perceptible at the surface.

2. The combination of claim 1, wherein:

the sequence of skew-tolerant Gray coded marks corresponds to a sequence of code words of a skew-tolerant Gray code in which each code word has a plurality of co-ordinate positions; and

in each consecutive group of three code words, the first and third code words differ only in two adjacent co-ordinate positions.

3. The combination of claim 2, wherein:

the object is for moving to a sequence of positions corresponding to the sequence of skew-tolerant Gray coded marks;

a plurality of the marks at each position of the sequence of positions; and

each plurality of skew-tolerant marks at each position corresponding to a respective code word of the sequence of skew-tolerant code words.

4. The combination of claim 3, wherein the moveable object is a rotatable disk.

5. The combination of claim 4, wherein the skew-tolerant Gray coded marks are perceptible to a magnetic read head.

6. The combination of claim 3, wherein the object is a rotatable shaft.

7. The combination of claim 6, wherein the skew-tolerant Gray coded marks are perceptible to an optical sensor.

8. A combination for indicating a position, comprising:

a moveable object;

a surface of the object; and

a sequence of n-bit code words on the object which are perceptible at the surface for indicating a position of the object;

the sequence of n-bit code words forming a skew-tolerant Gray code in which any code word of the sequence of code words differs from an adjacent code word in only one bit position, and in which, for any group of three consecutive code words, the first and third code words differ in only two adjacent bit positions.

9. The combination of claim 8, wherein:

the object is for moving to a sequence of positions corresponding to the sequence of code words; and

a respective code word of the sequence of code words at each position of the sequence of positions.

10. The combination of claim 9, wherein the moveable object is a rotatable disk.

11. The combination of claim 10, wherein the skew-tolerant Gray coded code words are perceptible to a magnetic read head.

12. The combination of claim 9, wherein the object is a rotatable shaft.

13. The combination of claim 12, wherein the skew-tolerant Gray coded code words are perceptible to an optical sensor.

14. A device for storing information, comprising:

a rotatable disk with two sides;

a plurality of radially-displaced tracks on at least one side of the disk for receiving information for storage;

at least one servo sector on the at least one side of the disk extending across the tracks; and

a sequence of n-bit code words in the at least one servo sector, each code word for identifying a respective track of the plurality of tracks;

the sequence of n-bit code words forming a skew-tolerant Gray code in which any code word of the sequence of code words differs from an adjacent code word in only one bit position, and in which, for any group of three consecutive code words, the first and third code words differ in only two adjacent bit positions.

15. The device of claim 14, wherein:

the disk is for rotating to a sequence of positions corresponding to the sequence of code words; and

a respective code word of the sequence of code words at each position of the sequence of positions.

16. The device of claim 15, wherein the skew-tolerant Gray coded code words are perceptible to a magnetic read head.

17. A device for storing information, comprising:

a rotatable disk with two sides;

a plurality of radially-displaced tracks on each side of the disk for receiving information for storage;

at least one servo sector on each side of the disk extending across the tracks on the side of the disk; and

a sequence of n-bit code words in the at least one servo sector on each side of the disk, each code word for identifying a respective track of the plurality of tracks on the side of the disk;

each sequence of n-bit code words forming a skew-tolerant Gray code in which any code word of the sequence of code words differs from an adjacent code word in only one bit position, and in which, for any group of three consecutive code words, the first and third code words differ in only two adjacent bit positions.

18. The device of claim 17, wherein:

the disk is for rotating to a sequence of positions corresponding to the sequence of code words; and

a respective code word of the sequence of code words at each position of the sequence of positions.

19. The device of claim 18, wherein the skew-tolerant Gray coded code words are perceptible to a magnetic read head.

20. A disk drive, comprising:

one or more rotatable disks;

a plurality of radially-displaced tracks on each disk for receiving information for storage;

at least one servo sector on each disk extending across the tracks on the disk;

a sequence of n-bit code words in each servo sector of each disk, each code word for identifying a respective track of the plurality of tracks on the disk;

the sequence of n-bit code words forming a skew-tolerant Gray code in which any code word of the sequence of code words differs from an adjacent code word in only one bit position, and in which, for any group of three consecutive code words, the first and third code words differ in only two adjacent bit positions; and

at least one transducer associated with each disk for producing readback signals in response the code words;

read/write electronics connected to each transducer for producing servo information in response to the readback signals; and

servo electronics connected to the read/write electronics for decoding code words of the sequence of code words from the servo information.

21. The disk drive of claim 20, wherein:

each disk is for rotating to a sequence of radial positions corresponding to the sequence of code words; and

a respective code word of the sequence of code words at each position of the sequence of positions.